

Remarks

Status of Claims

Prior to amendment, claims 15 to 23 and 40 were pending. Claim 15 has now been canceled. Claims 9-14 and 24-37 were previously withdrawn from consideration. Claims 16, 20 and 40 have been amended. No claims have been added.

The amendment to claim 16 clarifies that the cube corner element has a face on each of the replicated substrate and the machined substrate. The amendment to claim 20 clarifies that the exposed surfaces of the replicated and machined substrates define a face of the cube corner element. The amendment to claim 40 removes redundant language in the claim.

Status of Rejections

The Examiner has withdrawn the previous 35 USC § 102 rejections of claims 16 through 23 as anticipated by Amemiya et al (US Patent 5,429,857); of claims 16, 18, 20 and 40 as anticipated by Oshima et al (US Patent 5,866,233); and of claims 16-23 as anticipated by Bacon, Jr. et al (US Patent 5,614,286).

The Invention

The present invention is directed to a structured surface article that comprises a compound substrate. "Compound substrate" is defined in the specification at page 26, lines 19-22. Materials for making the compound substrate and how it may be made are described throughout the specification. A clear distinction is made between a replicated substrate and a machined substrate in both the definition and the other written description. As will be discussed in more detail below, the references relied upon by the Examiner fail to teach a machined substrate in combination with a replicated substrate.

Current Rejections

Claim 15

The Examiner has repeated the 35 USC § 112 rejection of claim 15 and the previous 35 USC § 102/103 rejection of claim 15 over Mihalik et al (US Patent 3,741,623), Oshima et al, Bacon Jr. et al and Nilsen et al.

Applicants have cancelled claim 15 thereby rendering these rejections moot.

Claim 40

Claim 40 stands rejected under 35 USC § 102(b) as being anticipated by Bacon for reasons of record. After reviewing the most recent Office Action, Applicants believe that the Examiner's rejection is as follows:

Bacon discloses a conformable cube corner reflective sheeting comprising a plurality of discrete cube corner segments (substrate and discontinuous substrate with faces) that are conformably bonded together (col. 6, lines 46-57 and figure 1). The height of the cube corner geometry on the segments is between 125 and 375 microns (col. 7, lines 1-5). From the figures the retroreflective sheeting can be seen to have a transition line separating the substrates and that the compound face terminates at a nondihedral edge which is not parallel to the nondihedral edge. (See Paper No. 6, page 4, paragraph 8.)

Applicants traverse this rejection. Bacon discloses a replicated substrate and a method for making a replicated substrate. Bacon fails to disclose a machined substrate, a method of making a machined substrate, and the combination of a machined substrate with a replicated substrate.

The text in Bacon at column 6, lines 46-57 only discloses an article. It says nothing about how that article was made. In order to determine how this article was made, one must go to column 7, lines 5-19. This disclosure states that the cube corner retroreflective elements are made by providing an orderly arrangement of parallel **microreplicated** parallel grooves. See specifically column 7, lines 5-8. Additionally, see column 7, lines 14-16 which teaches that the cube corner elements are formed by two sets of **microreplicated** grooves.

Accordingly, Bacon fails to disclose a required element of claim 40 and therefore fails to anticipate the claim. The rejection of claim 40 under 35 USC § 102(b) must be withdrawn.

It is noted that the rejection of claim 40 refers to language that is not a part of the claim (e.g., nondihedral edge). This terminology is irrelevant to present claim 40 and cannot support the rejection.

Claims 16-23 and 40

These claims stand rejected under 35 USC § 102(b) as anticipated by Nilsen. After reviewing the most recent Office Action, Applicants believe that the Examiner's rejection is as follows:

Nilsen discloses a retroreflective article comprising a cube corner microprism (substrate with faces) coated with a discontinuous metallic layer (discontinuous substrate with faces) (col. 2, lines 35-67 and figure 2). From the figures the retroreflective article can be seen to have a transition line separating the substrates and that the compound face terminates at a nondihedral edge which is not parallel to the nondihedral edge.

Applicants traverse this rejection. Nilsen, like Bacon, discloses a replicated article. See for example column 2, lines 36-67. This disclosure describes only a replication technique. As a result it fails to teach a machining technique and fails to teach a machined substrate. Since Nilsen fails to teach a required element of any of claims 16, 20 and 40 it fails to anticipate not only those claims but also claims 17-19 and 21-23. The rejection of these claims under 35 USC § 102(b) must be withdrawn.

It is noted that the rejection of claims 16-23 and 40 refers to language that is not a part of the claims (e.g., nondihedral edge). This terminology is irrelevant to the present claims and cannot support the rejection.

Finally, the Examiner has argued that both Bacon and Nilsen show the presence of a transition line. That is incorrect. Neither reference shows the presence of a transition line. Rather, both references show interfacial contact between various elements. This interfacial contact represents a two dimensional feature. The transition line referred to in claim 40 represents a line or other feature that separates the constituent faces of the compound face.

In view of the cancellation of claim 15 and the preceding remarks, Applicants believe that they have overcome all of the Examiner's rejections. Accordingly, favorable action and allowance of all pending claims is requested.

Respectfully submitted,

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